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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,875	03/15/2004	Christoph Petter	240154US0	8346

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MCCLENDON, SANZA L

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,875

Applicant(s)

PETTER ET AL.

Examiner

Sanza L. McClendon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/05</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. In response to the Amendment received on January 19, 2006, the examiner has carefully considered the amendments. The examiner acknowledges the cancellation of claim 26 and the addition of new claim 27.

Response to Arguments

3. Applicant's arguments with respect to claims 1-25 and 27 have been considered but are moot in view of the new ground(s) of rejection.

Preliminary Claim Observations

4. The examiner contends the preamble "sinter powder" and the future intended use "for selective laser sintering" have not been considered as claim limitations. With respect to the preamble, there is no structural limitation in the body of the claim to suggest weight be given to the term "sinter powder". See MPEP §2111.02. With regard to the future intended use limitation, case law holds "where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation". See *Rowe v. Dror*, 42 USPQ2d 1550 and *Catalina*, 62 USPQ2d 1785.

Claim Rejections - 35 USC § 102/Claim Rejections - 35 USC § 103

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on

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sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-9, 13-15, 17-23 and 27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Staas (4,415,706).

Note: claims 17-25 are product-by-process claims and therefore "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of the product does not depend on the method of production. Therefore, if the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process--see *In re Thorpe*, 227 USPQ 967 (Fed. Cir. 1985).

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Staas teaches compatible blends of polyglutarimides and polyamides. Said polyamides can be polylactams, such as nylon 6, nylon 11, and nylon 12. The examiner deems these polyamides include unregulated, since there is not a teaching otherwise in the teachings. Staas teaches said polyglutarimides can be found in amounts from 1 to 99 parts by weight and said polyamides can be found in amounts from 99 to 1 parts by weight. These ranges appear to read on claims 5-6 and 21-22. Said polyglutarimides are obtained by the process found in US 4,246,374, which is incorporated by reference. While the specific moieties and ranges of said moieties are expressly taught by either Staas or 4,246,374, US Patent 4,246,374 teaches when less than 100% imidization of the polymer is not obtained that, in addition to the glutarimide unit, acrylic units of the formula found in column 6 are present, wherein R4 is a lower alkyl or other radicals derived from ester moieties. The examiner deems that this includes moiety (iv) of applicant's instant invention. Or in the alternative, the Patent and Trademark Office is not equipped to conduct experimentation in order to determine whether Applicant's polymer (PMMI) differs and, if so, to what extent, from the discussed reference. Therefore, with the showing of the reference, the burden of establishing non-obviousness by objective evidence is shifted to the Applicants. Thus it appears the PMMI of claims 1, 5-6, 14-15, 17, 21-22, and 27 is anticipated or, in the alternative, obvious in view of said reference.

Melt blending or solvent blending processes can form said compatible polymer blend. This appears to anticipate claim 13-14. In addition to the PMMI and polyamide other processing components can be added, such as fillers, reinforcing agents, colors, pigments, flame retardants, processing aides and others--see columns 6, lines 20-23. Said compatible blends can be compression molded to make articles having improved optical clarity and toughness--see column 6 and 7. These molded articles appear to anticipate the moldings of claims 17-23.

Claims 1-9, 13-15, 17-23 and 27 are read in the reference.

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8. Claims 17-25 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Monsheimer et al (2004/0137228)

The applied reference has at least one common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Note: claims 17-25 are product-by-process claims and therefore "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of the product does not depend on the method of production. Therefore, if the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process--see *In re Thorpe*, 227 USPQ 967 (Fed. Cir. 1985).

Monsheimer et al teaches polymer powders for SIB processes. Said powders comprise at least one polymer or copolymer selected from those found in the abstract, wherein PMMI, PMMA, and polyamides are disclosed as useable alone or in mixtures. Said polyamides are preferably nylons, such as nylon 6, nylon 11 and/or nylon 12. In addition, the powder can comprise inorganic flow aids, such as those found on page 4, wherein silica, glass particles and aluminum particles are disclosed. Additionally, it is disclosed that pigments can be added--see page 4. With regards to claims 21 and 22, the examiner deems that since Monsheimer et al does not expressly give ranges for the components when used in a mixture, that all ranges are encompassed by the reference in the absence of evidence to the contrary and/or unexpected results. It is noted that Monsheimer et al teaches using a SIB process verses a SLS process for molding the powders. Monsheimer et al teaches that said two processes are very similar. The difference is the SIB is used for colored powders and it operates without expensive equipment (i.e., the laser) and the SLS process is a slower process because of the point

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light source and uses expensive equipment (i.e., the laser). Thus, the examiner deems that it would have been obvious to use an SLS process for molding the powder compositions of Monsheimer et al, when color is not an issue, with a reasonable expectation of success of achieving a three-dimensional molded product in the absence of evidence to the contrary and/or unexpected results.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 10-12, 16, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staas et al and Monsheimer et al.

Note: claim 16 is a product-by-process claim and therefore "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of the product does not depend on the method of production. Therefore, if the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process--see *In re Thorpe*, 227 USPQ 967 (Fed. Cir. 1985).

Monsheimer et al and Staas are disclosed in the above rejections. Staas et al does not expressly disclose producing moldings by laser sintering. However, as explained in the above Monsheimer et al, teaches that SLB processes are useable when colored powders/particles are not used. Staas and Monsheimer et al are analogous art since they are from the same field of endeavor that is blended powder compositions

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comprising polyamides and PMMIs for production of molded articles. Therefore, the examiner deems that it would have been obvious to use an SLS process for molding the powder compositions of Staas for the teachings of Monsheimer, when colored particles are not used, with a reasonable expectation of success of achieving a three-dimensional molded product in the absence of evidence to the contrary and/or unexpected results.

Staas et al does not expressly teach using additives, such as those found in claims 10-12 and 24-25. Staas et al does teach using additives, such as pigments, re-enforcing agents, processing aids, and others—see column 6. Monsheimer et al teaches using flow-processing aids, such as glass particles, silica, and aluminum particles. Therefore, it would have been obvious to use the processing aids as taught by Monsheimer et al. The motivation would have been a reasonable expectation of success in achieving better processibility of the powdered composition as taught by Monsheimer et al—see page 4 [0050].

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 19, 23, 24-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22-24 of copending Application No. 10/655,472. Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions claim a molded product comprising mixtures that can include polyamides and PMMI with glass beads. The molded products are deemed to be the same. The differences rest in the process of production. However, a product produced by a different process is either inherently or obviously the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

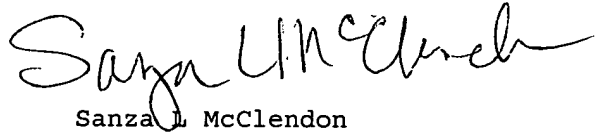
Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sanza L. McClendon

Examiner

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SMc

SANZA L. MCCLENDON
PATENT EXAMINER